VAC-CON

RED EQUIPMENT, LLC

GENERAL

The machine is capable of removing stones, grit, grease, sludge and other debris from sanitary sewer and/or storm drain lines by the flushing action of high-pressure water. The high-pressure sewer cleaner operates independent of the vacuum system.

The machine is capable of being operated by one man, with all operating controls for high-pressure water pump, hose reel, and vacuum, located at the front of the machine for safety.

DEBRIS BODY

Debris storage body has a minimum usable liquid capacity of 12 cubic yards. The debris body shall be round for maximum strength and constructed of 3/16 inch ASTM A242 Corten A steel for enhanced corrosion resistance.

There shall be a diameter liquid drain valve, "knife valve type" and screen weldment inside for removing excess liquids. Drain will have 10 feet of 6 inch lay flat hose.

A rear door safety prop shall be provided. For ease of maintenance there shall be no hydraulic components located inside the debris body or rear door.

The debris body has five (5) externally mounted door locks that lock hydraulically. One manual T bolt is installed for operator safety. Hydraulic operated, heavy duty wedge style door locks shall be installed. The door locks shall be operated by two double acting hydraulic cylinders. The rear door shall also hydraulically open and close (raise and lower) by means of two double acting hydraulic cylinders. The unlocking-opening and the closing-locking operations shall be controlled by a single switch and sequence valve.

Dual steel weldments with stainless steel screen 8" x 28" each providing up to 1200 square inches of added filtration for the vacuum system shall be provided inside the debris tank. These weldments shall be removable and require no cutting or welding.

Dump controls are located on curbside mid-ship of the unit, well forward of the dumping area for operator safety. A manual override system is provided in case of system failure.

The debris body has a five year warranty. A copy of manufacturer's warranty statement shall be enclosed with bid. If pro-rated so state:_____

An internal polyethylene float device with external indicator is supplied to show when body is loaded to capacity.

AUTOMATIC VACUUM BREAKER

The automatic vacuum breaker assembly is located inside the body.

The automatic vacuum breaker assembly shall be controlled by an electric over hydraulic circuit. The entire system shall be replaceable via a bolt on assembly. The assembly shall consist of a 12" inlet and two 8" ports that provide air flow to the vacuum system.

A full indication activates an automatic vacuum breaker shut down system that completely shuts down 100 percent of the airflow to the vacuum system to prevent overfilling and wastewater discharge into the atmosphere.

The vacuum breaker system is automatically activated (closed) when the parking brake system is released to eliminate carryover during transit.

The system is controlled/activated, at the front hose reel control station. This enables the operator to pick up large debris with boom and place debris on the road surface. This system can be used for safety in the event suction must be shut off in case of an emergency.

The vacuum system shall operate independent of the high-pressure water system.

something else

A means of starting, stopping and varying the vacuum suction from operator station at the front of the machine is provided.

Unit must be capable of vacuuming under water without air induction. A manometer/vacuum test may be required to demonstrate the system performance.

The have a non-prorated warranty.

VACUUM PICK UP HOSE

Shall be front loading, attached at the front of the machine in order to provide ease of positioning the machine over the manhole, as well as afford maximum safety for the operator.

The 8" will be mounted on a boom that will provide a minimum of 18' vertical lift utilizing dual hydraulic cylinder and 230 degree of boom rotation powered hydraulically for non-interrupted smooth movement. Boom to have a lift capacity of 500 lbs. at the front bumper.

The boom will be powered by an electric over hydraulic system: up/down by dual lift cylinders. The right/left movements shall be hydraulic via worm gear rotation.

The boom shall hydraulically telescope a minimum of 10 ft. forward from the operators station. The height of the boom shall not change while the boom is being telescoped. A manual override system shall be provided for right/left, and up/down functions in case of system failure.

Control of the boom is by means of a joystick control at the operator's station, requiring no cables at operator's feet for boom operation. A wireless remote control will be provided for Boom, Vacuum Breaker, Chassis Throttle, and Debris Body functions.A manual override system shall be provided for right/left, and up/down functions in case of system failure.

A boom coverage chart shall be provided stating the square feet the boom covers.

8 inch diameter pipe extensions with clamps will be provided and carried on the truck as follows:

0 6-1/2' Catch Basin Nozzle

0 6' Aluminum Pipe Extension

0 5' Aluminum Pipe Extension

0 3' Aluminum Pipe Extension

WATER SUPPLY

The water tanks shall have a minimum usable capacity of U.S. gallons.

The water tanks shall be constructed of non-corrosive, non-metallic, durable, cross-linked polyethylene to eliminate rust, corrosion, and stress cracking.

The water tanks shall be mounted at and below the truck frame level to provide a low center of gravity for truck stability.

A 2-1/2 inch diameter x 25 feet long hydrant hose with hydrant wrench is supplied on the unit.

An anti-siphon fill device is installed on the unit.

Inspection ports shall be provided to fill or to add chemicals to the water system.

A sight gauge to indicate water level is located within sight of the operator station.

The water tanks are protected by a minimum of 11 gauge steel plating mounted below the water tanks for protection against road hazards when unit travels over the road, off the road or to land fills.

The water tanks carry a ten year replacement warranty.

AUXILARY ENGINE (WATER PUMP DRIVE ENGINE)

HIGH-PRESSURE WATER PUMP

The high pressure water pump shall be rated to deliver smooth continuous pressure and flow through the entire flow range of the pump. The high pressure shall have smooth continuous flow for both the high pressure system and the hand gun system.

A continuous duty flow of g.p.m. and p.s.i shall be provided.

High-pressure relief valves are provided for both the high-pressure system and hand gun system.

The water pump operates independently of the vacuum system and is powered by the auxiliary engine via clutchless, direct dual powerband drive system.

The high-pressure water pump drive system carries a five year replacement warranty. Warranty excludes the drive engine, i.e. auxiliary engine.

The water pump is capable of running dry.

Controls for starting and stopping the water pump and to vary the flow and pressure shall be at the front hose reel operator's station.

The high-pressure water pump is equipped with a cold weather drain valve. The valve allows the operator to completely drain the high-pressure pump.

HOSE REEL ASSEMBLY

The hose reel assembly is mounted on the front of the vehicle. The hose reel shall have a minimum of 30" inside diameter with a capacity of 800' x 1" hose. The hose reel is hydraulically powered in both directions by means of a double chain and sprocket drive. The controls for operating the motor have a flow control device to regulate the rotational speed of the reel in both directions. All hydraulic hoses are behind a steel housing to protect operator from hydraulic oil if a hose fails. The hydraulic motor, chain, and sprockets have a protective cover or are mounted on the radiator side of the hose reel for operator safety. The hose reel articulates 180 degrees to the drivers side allowing operator to work in any position through this arc. This allows greater flexibility in truck placement for manholes located in tough areas and provides greater safety to the operator. Reel extends beyond the width of unit for greater flexibility for positioning reel over offset manholes, catch basins, etc. A hydraulically controlled outrigger leg is supplied that comes in contact with the ground at any one position. A warning light is located in the cab to warn the operator that the outrigger leg is not in its transported position prior to moving the unit. A manual bypass system for the hose reel assembly is provided to manually pull the reel assembly away from its transported position. This feature allows operator to check fluids without starting engines.

JET HOSE

800' x 3/4" jet rodder hose will be supplied rated for 3000 psi working pressure and 7500 psi burst pressure.

A heavy duty hose guide with 25' of nylon rope will be provided.

Nozzles shall be hardened steel with replaceable ceramic orifices as follows: 1) Chisel head penetrator & 1) standard sanitary.

MANHOLE CLEANING WATER SYSTEM (HAND GUN)

The high-pressure pump and independent water tank assembly supplied shall be used for manhole cleaning. A smooth continuous flow of 20 g.p.m. and pressure of 600 p.s.i. shall be provided for ease of operation. A hand gun pressure relief valve set at 600 p.s.i. shall be provided. One full functioning hand gun with on/off hand control, replaceable nozzle tip, 12 inch extension, adjustable spray and 50' x 1/2" hose with retractable reel will be provided.

The hand gun will attach to the system via a quick couple connection at the curbside of the unit. To avoid being coiled at the operator's station a hand gun holder will be provided at the front bumper.

HYDRAULIC SYSTEM AND LUBRICATION

The hydraulic system has a 55-gallon capacity.

The hydraulic system shall incorporate a main shut off valve in case of hydraulic failure.

The hydraulic system shall incorporate hydraulic pressure relief valves and pressure gauges for ease of trouble shooting and maintenance.

The unit is equipped on the passenger side, mid-section of the module, a permanent weatherproof white vinyl lubrication chart that points out lubrication points on the module and specifies what type of lubrication and hydraulic fluids are required. The chart also specifies the frequency of each lubrication point.

Remote plumbed grease fittings are provided for the vacuum compressor, boom rotation, and water pump drive areas.

ACCESSORIES

A minimum twelve (12) month manufacturer's guarantee on the unit will be provided.

1	Debris body power flush out system
1	Rear splash guard, tank mounted (2 - 10 O'clock Position)
1	Air purge system
1	1/4 turn ball valve water drain
1	Variable flow valve
1	Power Guide "Reel Power" level wind guide
1	Storage box shall be provided with two roll out shelves
1	2) steel rear mounted tool boxes, 24" x 18" x 18"

1	Rear mounted tow hooks
1	Auxiliary engine remote oil drain
1	Remote boom grease zerk assembly, (accessible from ground level)
1	Remote debris tank grease zerk assembly (accessible from ground level)
1	15' leader hose
1	Water pump remote oil drain
1	Traffic Camera with Color Monitor (Camera placement must be picked)
1	Rear traffic camera
1	Long handle storage/ (2) PVC
1	Long handle storage placement - rear of mainframe
1	Omnibus Precision Power utilizes CAN BUS technology to optimize hydrostatic performance and improve vacuum efficiency.
1	Hydroexcavation package includes: 50' retractable handgun hose reel with 50' of 1/2" high pressure hose, HP/Quick disconnect, heavy duty HP unloader valve, main control ball valve, 72x1/2 Sch. 80 Lance w/ Quick Dcn., Sngl. Fwd. Spray Nozzle, Horiz. Hand.
1	Titan Style Water Gauge
1	SEGMENTED BOOM ELBOW

LIGHTING

The entire module electrical system is vapor sealed to eliminate moisture damage.

All wiring is color-coded, labeled and run in sealed terminal enclosures.

All module circuits are protected by circuit breakers.

Clearance lights and reflectors are furnished in accordance with D.O.T. requirements.

2	Mirror mounted LED strobe light, with limb guard - Whelen L21HAP LED Beacon with Whelen BGH Branch Guard
1	LED strobe light with limb guard, rear debris tank door mounted - Whelen L21HAP LED Beacon with Whelen BGH Branch Guard
1	4 LED strobes - (2) front bumper, (2) rear bumper - Whelen 50A03ZCR - Amber
1	LED Arrow stick - Whelen TAM85 Traffic Advisor
1	LED Boom Mounted Flood Light - Whelen NP6BB Worklight
1	LED Rear Mounted Flood Lights - Whelen NP6BB Worklight
1	LED Flood Light - Level Wind Guide with Limb Guard - Whelen NP6BB Worklight

PAINT

Unit paint surfaces are shot blasted, Ambershield zinc primed, sanded and sealed with epoxy primer. Hose reel spool, debris tank and sides of mainframe painted with PPG Delfleet single stage polyurethane paint. All other paintable surfaces coated in PPG Ambershield textured black paint.

Unit shall have reflective White or Blue

Chassis shall be painted manufacturers standard white.

to customer special instructions

with DuPont Imron 5000 polyurethane paint.

Unit shall have reflective black side and boom stripes and rear door chevrons.

Chassis shall be painted

TRAINING AND MANUALS

Operator training will be conducted by a factory-trained representative for a minimum of one day at the time of delivery. 3 copy(ies) of the operating and maintenance manual for the sewer cleaner module shall be provided upon unit delivery. An operational video will be provided with the unit.

MOUNTING AND DELIVERY

The unit described will be mounted on a truck chassis acceptable to the body manufacturer at the factory of the body manufacturer.

OMNIBUS™ PRECISION POWER CONTROL SYSTEM:

The Omnibus™ Precision Power control system shall be equipped with a joystick, a minimum of 3 - CAN switch packs and a 7" LCD color monitor.

The Joystick will have 4 buttons and a trigger.

A minimum of 3 CAN switch packs capable of controlling 8 functions each are required. Standard, one switch pack to be mounted in the chassis cab, at the hose reel operators station and at the mid body operating station curbside.

The display shall be 7" LCD and full color. It shall have 800x480 resolution and be IP 6K5. The display shall have 12 buttons, a status light, a light sensor for automatic adjustment in variable ambient lighting, a home key, and push-turn control knob and a back button. In the event of display damage, the machine is capable of operating without the display. The locked operator's screen will display: Chassis engine tachometer, auxiliary engine tachometer, chassis engine fuel level, auxiliary engine fuel level, work/PTO mode, hydraulic oil temperature warning and alarm, emergency stop activation, vacuum breaker status, water pressure, blower speed, hose footage, maximum hose reel speed and will contain other system's pages including troubleshooting and on-board machine diagnostics. The display will be mounted on an adjustable linkage for operator visibility and ergonomics. The display will be retracted into a hinged cabinet during transportation.

EXCEPTIONS AND DEVIATIONS:

Bidder shall fully explain every variance, exception, and or deviation to the bid specifications. Additional sheets/lines may be added if required.

09/21/2021

NEW SOURCEWELL TITAN COMBINATION JET/VACUUM SEWER CLEANER

SOURCEWELL CONTRACT: 122017-AMI/VAC

Customer: CITY OF JOPLIN Shipping: MISSOURI

Requirement Specification	
Combination jet/vacuum sewer cleaner with all standard equipment TAQD311HE/1300 **(TITAN PACKAGE)**	
Freightliner Model 114SD 6 x 4, 66,000 GVWR chassis with a 370 HP diesel engine, Allison 3000 RDS automatic transmission and A/C	
Body mounting on Chassis	
Titan Package Including all standard equipment	
AQD Fan drive for Titan	
10' Aluminum telescoping boom with pendant control station	
Front mounted articulating to driver's side hose reel, 800' x 1" capacity (Std. Pivot)	
25' aluminum intake hose (1 - 3', 2-5', 1-6' and 1-6.5' catch basin nozzle) with locking quick clamps	
Sealed and locking tool boxes	
Zink, PPG paint - line on process, "aircraft-grade" primer	
12 month standard warranty on module	
5# fire extinguisher	
Set of triangles	
5 year centrifugal compressor (fans) warranty	
2 year water pump warranty	
5 year water pump drive warranty	

Requirement Specification	
800' x 3/4" Jet rodder hose	
50 GPM @ 3000 PSI Giant water pump system with a GM 5.7 Gas 140 HP engine with auxiliary engine driven hydraulics	
A flat style rear door in lieu of dome style door including hydraulic opener	
Rear splash guard (2 - 10 O'clock) tank mounted	
1/4" Turn ball valve water drain	
50' Capacity retractable hand gun hose reel	
Air purge system	
Debris body "Power Flush" system, 8 jets	
Electronic Titan style water level gauge	
Hydro-X Package	
Swivel upgrade 1-1/4" rotary union	
Upgrade ball valves 1-1/4" plumbing + heavy duty ball valves	
Variable flow valve	
Water pump remote oil drain	
Winter recirculating connection for high pressure hand-gun	
Winter recirculating connection for low pressure hand-gun	
Power Guide "Reel Power" level wind guide	
Auxiliary engine remote oil drain	
Boom headache rack	
Long handle storage	
Rear mounted tow hooks	
Remote boom grease zerk assembly	
Remote debris tank grease assembly	
Segmented boom elbow	

Requirement Specification	
LED 4 Strobes - (2) front bumper, (2) rear bumper	
LED Arrow stick	
LED Boom mounted flood lights with limb guard	
LED Flood light - level wind guide with limb guard	
LED Rear mounted flood lights with limb guard	
LED Strobes with limb guards, rear debris tank mounted	
Two Mirror mounted LED strobe lights with limb guards	
Omnibus precision power system	
Rear camera placement	
Wireless remote control	
Traffic camera with color monitor	
Paper Vac-Con Manual	
1" x 15' Length leader hose	
Roll out shelves for storage box behind cab	
24" x 18" x 18" Steel rear tool boxes mounted on each side of extended frame units	
Optional Striping Package - Black	
Paint Chassis Hood Flat Black	
Paint Module: TBA	
1" Bulldog with skid proved by RED Equipment	
Two standard ENZ nozzles, one sanitary (egg) and one Chisel point penetrator	
ICC lighting	
Hose guide (tiger tail) for hose protection, hydrant wrench, 25' of fill hose	
20 gpm @ 600 PSI wash down system with hand gun and 25' of ½" hand gun hose	
Local dealer pre delivery and inspection	
On site customer training	

Requirement Specification	
Delivery to customer facility	
TOTAL PRICE OFFERED TO SOURCEWELL MEMBER	$479,250.00
TRADE IN: 2013Vactor on a International Chassis Mileage: 19,086, VIN: 1HTWGAZT6DH302296	($30,000.00)
TOTAL PRICE OFFERED TO SOURCEWELL MEMBER AFTER TRADE IN	$449,250.00

Delivery is _____ Days after receipt of order.

SOURCEWELL CONTRACT NO 122017-AMI/VAC

VENDOR/CONTRACT HOLDER: VAC-CON, INC.
969 HALL PARK RD
GREEN COVE SPRINGS, FL 32043

CONTACT: M.J. DUBOIS
EMAIL MJDUBOIS@DUCOLLC.COM
PHONE: 410-924-1004

General Warranty

CITY OF JOPLIN, MO

Specific written warranty statement provided with each new truck shall take precedence over this or any other warranty statement.

COVERAGE:

VAC-CON, as seller, warrants Combination Sewer Cleaning, Xcavators, and Hot Shot equipment manufactured by it, bearing its name shall be free from defects in material, and workmanship, under normal use and service as determined by us, for a period of (24) twenty-four months from the date of delivery to the first retail purchaser.

VAC-CON, as seller, warrants all Industrial Vacuum Machine equipment manufactured by it, shall be free from defects in material and workmanship, under normal use and service as determined by us, for a period of (6) six months from the date of delivery to the first retail purchaser.

Should any equipment or part of such equipment sold hereunder prove to be defective in material or workmanship within said period, and be returned to Seller's factory no later than 15 days after the expiration date of the warranty, transportation charges prepaid by the Buyer, and upon examination be found to be defective, such part will be replaced at the factory by the Seller free of charge, but the Seller shall be under no further liability in respect to such warranty. It is expressly understood that the Seller's liability is limited to furnishing of such replacement parts within a reasonable length of time and that the Seller will not be liable for any damages, losses or expenses arising in connection with the use of or inability to use the unit(s), including but not limited to, injuries to persons or damage to property, loss of profits or anticipated profits, or loss of vehicle use. Buyer shall be responsible for the payment of duties or taxes on warranty parts, if applicable. The Seller shall be under no liability because of normal wear and tear of operation or maintenance contrary to the manufacturer's official Operator's Manual. The Buyer accepts any liability for damage or injury resulting from the removal or alteration of safety guards and safety precautions provided on the unit at the time of delivery. This warranty shall not apply and VAC-CON shall have no liability under it or otherwise if accident, careless handling, or improper applications shall have injured the unit or if any repairs have been made to the unit by other than VAC-CON, its agents or employees.

Warranties covering major components not of VAC-CON manufacture (power plants, hydraulics, trucks, vacuum compressors, transmissions, electrical components, batteries, tires, etc.) are warranted by their respective manufacturers.

We give no warranty express or implied, as to description, quality, productiveness or any other matter and the Buyer hereby waives the right of refusal and return of the goods which is usually connected with non-warranty.

It is the sole responsibility of the purchaser to use this equipment in an appropriate application and a safe manner. VAC-CON assumes no responsibility or liability for its misuse.

FIVE (5) YEAR WARRANTY:

VAC-CON warrants that the fan blades, auxiliary engine water pump drive components (excluding engine and pump) and debris tank shall be free from defects in material and workmanship, under normal use and service as determined by the manufacturer, for a period of sixty (60) months (not pro-rated) from the date the unit is first placed into service.

LIFETIME WARRANTY:

VAC-CON warrants that the fresh water tanks shall be free from defects in material and workmanship, under normal use and service as determined by the manufacturer, for the lifetime of the unit, from the date the unit is first placed into service.

HOT SHOT WATER TANKS:

One (1) YEAR WARRANTY: VAC-CON warrants that the fresh water tank shall be free from defects in material and workman- ship, under normal use and service as determined by the manufacturer, for a period of twelve (12) months (not pro-rated) from the date the unit is first placed into service

This warranty is not transferable.

WARRANTY REGISTRATION:

Warranty must be registered with Vac Con upon delivery to the first retail purchaser in order to be in effect. Failure to do so will result in the original invoice date becoming the inception date of warranty coverage. Vac Con is not responsible or liable for loss of warranty coverage due to failure to register the warranty in a timely manner.

SPECIFIC EXCLUSIONS:

Normal and routine maintenance as specified in the specific manuals as indicated by the manufacturer's official Operator's Manual. Travel time, meals, lodging, transportation expenses, rental units, and work unrelated to a covered event. Certain parts are deemed consumable or expendable items. These parts are consumed with routine usage of the equipment and are not covered by equipment warranty. Excluded items include, but are not limited to: Nozzles, Nozzle skids, Sewer Cleaning Hoses, Ball Valves, Gate Valves, Knife Valves, Needle Valves, Hose Guides, Rotary Unions, Hand Guns, Unloader Valves, Water System Relief Valves, Hydrant Fill Hoses, Water Pump Packings, Water Pump Check Valves, all Belts, Vacuum Hoses, Boom Suction Elbows, Telescoping Boom Tubes, Suction Tubes, Catch Basin Tubes, Tube Clamps, Rear Door Wear Plate, Lay Flat drain hoses, All Bearings, All Seals and Gaskets, All Fluids, All Filters, Fuses, Electrical Switches, Electric bulbs and lenses.

LIMITATIONS:

Warranty claims must be filed within thirty (30) calendar days from date of repair. Claims submitted more than forty-five (45) days after date of repair, labor will not be considered. Claims submitted more than ninety (90) days after date of repair will not be considered.